TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective December 1, 2011
WIN-1490

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **May 2012**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Ultra Sterling Aluminum Clad Wood Double Hung Studio Windows, Individual, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc.
1323 South Eleventh Avenue
Wausau, WI 54401
(715) 842 - 5666

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The aluminum clad wood double hung studio windows evaluated in this report are individual, impact resistant windows. This product evaluation report is for aluminum clad wood double hung studio windows based on the following tested constructions:

General Description:

System	Description	Rating	Hallmark Certification
1	Ultra Sterling Double Hung Studio; Missile Level D, Wind Zone 4	CW-PG65 65x80-FW FW-C65 65 x 80	413-H-994.00 413-H-994.01 413-H-994.02

Product Dimensions:

System	Overall Size	Sash Size	Glass Size
1	65" x 80 7/16"	63 7/16" x 78"	60" x 73 1/4"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1	SG-1	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

SG-1: Single glazed with a laminated glass unit. The laminated glass unit is comprised of two ¼" annealed glass lites separated by a 0.090" SGP interlayer. The glass thickness in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The glass unit is set from the interior onto a bed of silicone sealant. Another interior bed of silicone sealant is applied at the interior edge of the glass unit around the perimeter and a vinyl bracket is installed into the kerfs in the sash. Along the interior, wood glazing stops are secured with brads spaced approximately 1 inch from each end and approximately 5 to 6 inches on center.

Frame Construction: The frame members consist of molded pine. The frame corners are rabbeted, butted, sealed with silicone, and secured with staples. Interior wood stops are secured with staples.

Aluminum Cladding: Extruded aluminum cladding is utilized at the head, sill, and side jambs and is snap-fit onto the wood frame members. The aluminum cladding is mitered and joined with a corner key and screws.

Sash Construction: The sash members consist of molded pine. The sash corners are mortise and tenon construction and are secured with screws. The sash is sealed to the stops with sealant and secured to the frame with screws.

Aluminum Cladding: Extruded aluminum cladding is square cut and secured to the wood members with brads.

Product Identification: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; product name; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05, AAMA/WDMA/CSA 101/I.S.2/A440-08, and ASTM E 1886-05 and ASTM E 1996-06.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	65	$80\frac{7}{16}$	± 65

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I zone** and the **Seaward zone**. The window assemblies passed Missile Level D specified in ASTM E 1996-06. The window assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These window assemblies will not need to be protected with an impact protective system.

Acceptance of Smaller Assemblies: Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation drawings are available from the manufacturer.

Installation:

Option 1: The window assembly shall be fastened to minimum Southern Yellow Pine lumber. The window assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips (1 5/8" x 10 1/16" x 0.04") are secured to the window frame side jambs, head, and sill. The clips are secured to the window frame with two (2) No. 8 x 3/4" screws. The clips are secured to the wall framing with one (1) No. 8 x 1 3/4" screw. The fasteners shall be long enough to penetrate a minimum of 1 1/2" into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

System	Head and Sill (distance from each end)	Head and Sill (on center spacing)	Side Jambs (distance from each end)	Side Jambs (on center spacing)
1	16 1/4"	16 1/4"	11 1/2"	11 1/2"

Option 2: The window assembly shall be fastened to minimum Southern Yellow Pine lumber. The window assembly is secured to the wall framing using the window frame with minimum No. 10x2 1/2" screws. The fasteners shall be long enough to penetrate a minimum of 1 1/2" into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing:

System	Head and Sill (distance from each end)	Head and Sill (on center spacing)	Side Jambs (distance from each end)	Side Jambs (on center spacing)
1	10"	10"	8"	8"

Nailing Flange (both options): The perimeter of the window is secured with minimum 12 gauge smooth shank roofing nails spaced 12 inches on center penetrating through the nailing flange.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.